

ABSTRACT OF THE DISCLOSURE

A communication system that allows two-way communication is provided with the use of a sheet-type optical conductor capable of providing a favorable level of light-extraction efficiency and uniformly distributed optical output power. The sheet conductor includes a sheet-type optical medium containing particles for reflecting light, and propagates the optical signal injected from one edge of the medium to the other having an optical receiver by scattering the optical signal by means of the particles, which is designed such that the value of $\Phi \cdot N_p \cdot L_G \cdot K_C$ is less than or equal to 0.9, where Φ is the scattering cross-sectional area of the particles, L_G is the length of the optical medium in the direction in which the light is propagated, N_p is the density of the particles, and K_C is a correction coefficient.